Amendments to the Claims

Listing of Claims:

Claims 1 - 9 (canceled).

Claim 10 (new): A control method for a valve actuator, which comprises the following steps:

selectively charging and discharging the actuator to various charge states, each corresponding to a valve position;

controlling the charging and discharging according to a specified control action corresponding to a specified setpoint value for the charge state;

during an idle time between two consecutive chargings or dischargings, determining a controlled variable reflecting the charge state of the actuator and/or a valve position;

acquiring an external measured variable in the form of a pressure at the valve; and

during an idle time between two consecutive chargings or dischargings, regulating the control action in dependence on the controlled variable and, additionally, on the external measured variable.

Claim 11 (new). The control method according to claim 10, which further comprises charging and discharging the actuator to charge states corresponding to a partially open valve position.

Claim 12 (new). The control method according to claim 10, which comprises determining the controlled variable by measuring a voltage across the actuator and/or a charge of the actuator.

Claim 13 (new). The control method according to claim 10, which comprises determining the control action for charging by a specified charging characteristic, determining the control action for discharging by a specified discharging characteristic, wherein the charging characteristic and the discharging characteristic have a specified shape and steepness.

Claim 14 (new). The control method according to claim 13, which comprises adjusting the steepness of the charging characteristic and/or of the discharging characteristic as part of the regulating step.

Claim 15 (new). The control method according to claim 13, which comprises adjusting the shape of the charging characteristic and/or of the discharging characteristic as part of the regulating step.

Claim 16 (new). The control method according to claim 10, which comprises determining the control action by the charging duration and/or the discharging duration, wherein the charging duration and/or the discharging duration are adjusted as part of the regulating step.

Claim 17 (new): The control method acording to claim 10, wherein the valve actuator is a piezoelectric actuator and the valve is an injection valve for an internal combustion engine.

Claim 18 (new): The control method according to claim 10, wherein the regulating step is a closed-loop control step.

Claim 19 (new). A control device for at least one valve actuator, the control device comprising:

a controller for controlled charging and/or discharging of the valve actuator to specified charge states corresponding to a specified setpoint value, with each each of the charge states corresponding to a valve position and said controller being characterized by a specified control action; and

a closed-loop control regulator connected to said controller for adapting the control action of said controller;

said regulator having an input connected to the actuator and/or to the valve in order to acquire a first controlled variable;

the controlled variable reflecting a charge state of the actuator and/or a valve position; and

said regulator being configured to acquire the controlled variable discontinuously during idle times in each case and adjusting the control action discontinuously in idle times in each case;

said regulator having an input connected to at least one sensor for detecting a pressure at the valve defining a second controlled variable;

Claim 20 (new). The device according to claim 19, wherein said regulator is superimposed on said controller.

Claim 21 (new): The device acording to claim 19, wherein the valve actuator is a piezoelectric actuator and the valve is an injection valve of an internal combustion engine.